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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,692	07/29/2005	Lyder Moen	2116	1844
24264	7590	04/28/2008		
TIMOTHY J. MARTIN, P.C. 9250 WEST 5TH AVE LAKEWOOD, CO 80226			EXAMINER	
			TSAL CAROL S W	
			ART UNIT	PAPER NUMBER
			2857	
			MAIL DATE	DELIVERY MODE
			04/28/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/522,692

**Applicant(s)**

MOEN, LYDER

**Examiner**

CAROL S. TSAI

**Art Unit**

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 8/30/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/55/02)
- Paper No(s)/Mail Date 8/30/2005
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show labels on the blank boxes as to their function, for example: element 10 in Fig. 1, as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 6,757,668 to Goebel et al.

4. Goebel et al. disclose a method of determining condition of a turbine blade and utilizing collected information for estimating a lifetime of the blade as an indicator for when a rotating stall is occurring in a compressor's turbine blades, said method comprising: utilizing a vibration sensitive sensor that is fixed to a casing of the compressor (see col. 19-33) whereby measured values from the vibration sensitive sensor are filtered and allocated to respective frequencies, with measured values within respective frequency groups being given one of a minimum and a maximum value limit (see col. 7, line 34 to col. 8, line 45 and col. 16, lines 4-26), and whereby occurrence of said rotating stall, as mainly indicated by frequency fluctuations which deviate from a normal blade frequency, is indicated and included in a lifetime estimation for the turbine blade when a blade pass frequency of a compressors stage in question starts to fluctuate (see col. 16, line 27 to col. 17, line 1).

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Gotoh et al. disclose an operation monitoring unit for acquiring process data from sensors installed to a gas turbine and operation information of the gas turbine; communication units for transmitting each of said two kinds of data on the gas turbine acquired in the operation monitoring unit; an analysis server which calculates values of equivalent operating time using each of the two kinds of data obtained through the communication units, the value of equivalent operating time evaluating a degree of damage of a diagnosed position for each of a plurality of degradation-and-damage modes, and calculates a value of whole equivalent operating time by adding the values of equivalent operating time for the individual degradation-and-damage modes; and a facility management unit client-server systemized using the analysis server and a WWW browser or WWW server being provided.
7. Kojima et al. disclose a blade of a gas turbine having a novel heat-resistant ceramic coating layer, and also to a method of producing such a blade.
8. Hass discloses a method and apparatus for controlling thermal stress in a turbine engine including the steps and structure for heating or cooling the thermally cycled engine parts for a certain amount of time at a certain rate before or while the operating point of the engine is changed.
9. Tsuboi discloses a nondestructive inspection method predicting the lifetime of a measured object.

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***Contact Information***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAROL S. TSAI whose telephone number is (571)272-2224. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ramos-Feliciano S. Eliseo can be reached on (571) 272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

April 24, 2008

Art Unit 2857

/Carol S Tsai/

Primary Examiner, Art Unit 2857